The impacts of Section 54 stoppages on staff morale

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The main reasons for the issuing of Section 54 notices under the Mine Health and Safety Act, 29 of 1996 (MHSA) is the failure of mining operations to comply with the Act. When health and safety standards and procedures have not been properly implemented and do not comply with the MHSA, a Section 54 notice is likely to be issued by the Inspector of Mines from the Department of Mineral Resource (DMR). Section 54 of the MHSA states that 'If an inspector has reason to believe that any occurrence, practice or condition at a mine endangers or may endanger the health or safety of any person at the mine, the inspector may give any instruction necessary to protect the health and safety of persons at the mine'. Section 30 of the Occupational Health and Safety Act, 85 of 1993 (OHSA) also grants an inspector powers to deal with dangerous conditions. A number of statements and reports have been published about the impacts of Section 54 on the mining business, but very little (if any) information is available on the impact on mineworkers' morale. In 2011, Section 54 stoppages cost the South African economy \$500 million by losing 300 000 precious metal ounces of production (Mining Weekly, 2012). Warren Beech of Hogan Lovell law firm believes that Section 54 stoppages affect the morale of the team, the health and production momentum of the team, and the remuneration of employees, which includes the safety bonus (Naidoo, 2014). This paper explores the impacts of the issuing of Section 54 notices on mineworkers' morale, using a platinum mine in the North West Province as a case study.

INTRODUCTION

Ahmad and Schroeder (2001) define employee morale as the degree to which an employee feels [positive] towards his/her work and work environment. Employee morale can also be viewed as incorporating job satisfaction, intrinsic motivation, work meaningfulness, organizational commitment, and work pride. Weakliem and Frenkel (2006) suggest that employee morale should be used as a general term to refer to peoples' perception about their jobs.

The Great Place to Work Institute (GPTW) in the USA conducted a survey of the factors that contribute to employee morale. The research found that most employees regard physical safety as an important factor. GPTW suggests that for an organization to be regarded as safe and a great place to work, the mental wellbeing and emotional aspects of employees should be addressed. GPTW further explains that an employee who feels stressed and psychologically unsafe tend to be reactive and unstable. The work stresses emanate from month-end deliverables, for example, the drive to meet production targets, puts pressure on employees in the mining industry.

In 2006, the Coaltech task 7.8.4 commissioned by Coaltech and several coal mining industry stakeholders, including the CSIR and universities, set up a collaborative research consortium that conducted a diagnostic assessment of factors that contribute to employees' productivity, safety, stress, and morale. A relationship between remuneration (salaries and production and safety bonuses) systems, employee stress, and morale was established. The research found that the factors that tend to compromise the ability of teams to meet the targeted production tonnages and thus cause stress and impact the morale of employees, are geological problems, equipment breakdowns, underground water accumulation, fatalities, absenteeism, delays in release of bonuses as a result of uncompleted or late submission of paperwork, and the unequal distribution of bonuses in the production area and across employees ranks and the exclusion of employees outside production sections (Coaltech, 2020).

The personal interviews with employees during the Coaltech study indicated that financial difficulties have a major impact on employee morale. The employees explained that the unfair distribution of bonuses among the workers also adversely affects morale.

This paper will consider the safety aspect and the role played by the interpretation of the Mine Health and Safety Act, particularly with regard to the issuing of Section 54 stoppages. The Coaltech study found that management is of the opinion that safety incentives and penalties have influenced compliance with the MHSA. Furthermore, accident reporting, retraining, and administrative procedures enforce compliance with the MHSA and safe work practices.

EMPLOYEE MORALE

Rechenthnin (2004) suggests that inadequate safety programmes could have a negative influence on morale in a company, particularly in high-risk industries such as mining. Figure 1 shows a list of high-and low-risk industry groups, as defined by GPTW.

Industry	No. of paired companies	Average no. of OSHA inspections	Risk category
Construction	7	22.57	High
Mining ^a	1	14.50	High
Hospitality	5	7.20	High
Manufacturing	17	6.47	High
Retail	17	6.26	High
BioPharma	4	3.88	High
Media	6	1.67	Low
Professional services	28	1.39	Low
Healthcare	13	1.31	Low
Education and training	1	1.00	Low
Telecom	2	1.00	Low
Information technology	14	0.86	Low
Finance and insurance	28	0.30	Low
Electronics	2	0.00	Low
Advertising/marketing	5	0.00	Low
	150 (total)	3.89 (avg)	

Figure 1. High- and low-risk industry groups (GPTW, 2008).

The Coaltech task team identified financial difficulties (particularly debt) as the major stressor in employees' lives. In addition, employees in job categories three to eight identified the fluctuating bonus system and unfair bonus distribution as among the factors causing increased stress.

ISSUING OF SECTION 54 NOTICES

There needs to be an understanding of the whole process leading to issuing of a Section 54 notice, prior to detailing its impacts. Whether or not this process is being followed is another research topic which needs investigation.

The former Minister of Mineral Resources, Susan Shabangu, said 'I want to state categorically that it is mischievous to regard Section 54 as the only contributor to the loss of production. This flies in the face of the reality that mine operational challenges, can contribute significantly to low production'. This study will investigate whether changes in employee morale contribute to loss of production as a result of the issuing of Section 54 stoppages. Most mining companies have responded negatively to the issuing of Section 54 stoppages, saying that actually it makes the mines unsafe because of the impact on staff morale. This paper also investigates whether this claim is valid.

The primary objective of the MHSA is to ensure that mineral resource development in South Africa is carried out in such a manner that the health and safety of employees and the public is not compromised. The MHSA provides inspectors with the discretion to decide when enforcement is required and the appropriate measures to ensure compliance. Careful assessment and auditing of circumstances should be done before any enforcement, and discretion should be exercised in a fair and reasonable manner.

A MHSA Section 54 notice is issued as a punitive measure and the intent is to enforce compliance. If an inspector has reason to believe that any occurrence, practice, or condition at a mine endangers the health and safety of individuals, he/she may issue any instruction necessary to protect them – including but not limited to an instruction that:

- (1) Operation of the mine or part of the mine be halted
- (2) The performance of any act or practice at the mine or part of the mine be suspended or halted
- (3) The employer must take steps set out in the instruction, within the specified period, to rectify the occurrence, practice, or condition

(4) All affected persons, other than those who are required to assist in taking the steps set out in the instruction, under the direct supervision of a member of management, be moved to safety (Msiza, 2011).

COPING WITH SECTION 54 STOPPAGES

Mining companies should have procedures in place for managing a Section 54 stoppage. A classic example of such procedures comes from the platinum sector. The mine in question stipulates a number of activities for dealing with a Section 54, as well as a Section 55 notice. Upon receiving a Section 54 notice from the inspector, the mine must firstly ensure that the instructions issued by the inspector are understood. Management, the SHEQ department, and health and safety representatives should have a clear understanding of the actions that need to be taken. There should be plans in place regarding activities during the stoppage. A suggested procedure to keep employees busy and motivated is firstly to send the affected teams to the mobilization centre, and secondly to undertake remedial activities and conduct inspections. All Section 54 or 55 notices should be filed in a central system to which all employees have access, and also be posted on all mine noticeboards. Management should put a task team together to prepare a presentation to the Principal Inspector so as to get the Section 54 lifted. Green area meetings and training on Section 54 should be undertaken, with the aim of discussing issues involving noncompliance, addressing deviations, and avoiding repetitive deviations.

Although these steps will have a positive impact, none of them take into account the psycho-social wellbeing of employees. A Section 54 stoppage undoubtedly impacts the mining business, because of the loss in production. However, this is not the only adverse consequence; staff morale is one of the key aspects that has been somehow overlooked when considering the impacts of Section 54 stoppages.

AIMS AND OBJECTIVES

This study investigates whether compliance with the Mine Health and Safety Act is a significant factor in employee morale. The study will also investigate the role played by the Mine Health and Safety Act in enhancing or depressing employees' morale, and consider whether the issuing of a Section 54 has any psychological impacts on employees.

The aim of this study is to determine whether there is a correlation between Section 54 stoppages and employees' behaviour. The outcomes should indicate how employees at different levels respond to and deal with the issuing of a Section 54. It aims to assess the current health and safety management system of a platinum mine, as well as quantify the frequency of the issuing of Section 54s at this particular shaft.

This study should provide the following benefits:

- 1. The understanding of the relationship between the issuing of a Section 54 and employee morale
- 2. Act as a pilot for other South African platinum mining companies with similar conditions as the case study mine. It will indicate whether there is correlation between the investigated variables
- 3. Demonstrate whether compliance with the Mine Health and Safety Act is a significant factor in employee morale
- 4. Indicate whether employees recognize the contribution of the Department of Mineral Resources through Section 54
- 5. Provide ideas on how employees should respond to and deal with the issuing of a Section 54.

METHODS

A three-day visit was made to the case study shaft and the data was collected using both qualitative and quantitative techniques. The questionnaire was divided into three sections: the first dealing with demographic information, the second regarding the knowledge of employees about Section 54 and the MHSA, and the third regarding their feelings, responses, and coping mechanisms when a Section 54 stoppage has been issued. The following methods were used in collecting the data:

- 1. Two questionnaires were designed to suit the different literacy levels prevalent at the mine
- 2. Questionnaire one was designed for employees with a lower level of literacy, people with the NQF level 3 or lower, and was written in the local language
- 3. Questionnaire two was designed for employees who understand English and have a slightly higher level of literacy, above NQF level 3
- 4. A random selection of employees was made, and personal face-to-face interviews conducted
- 5. All questionnaires were collected and collated in preparation for analysis
- 6. The data was subjected to statistical analysis.

Only the first questionnaire is dealt with in this paper, due to time constraints and the difficulty in accessing data. This project is still ongoing and the survey of the employees with a higher level of literacy, with NQF level 5 and above, is still to be conducted.

STUDY AREA

The study site is a platinum mine in the North West Province. The mine has realized the need to conduct research on several issues, one of which is the impact of Section 54 stoppages on employee morale. The survey was conducted at the mine's mobilization centre, where 120 employees were undergoing education on the mining process and how the team and individuals add value to the entire mine value chain.

DISCUSSION AND ANALYSIS

Tables I–IV in the Appendix illustrate the data collected from the platinum mine's Training Centre, where the survey was conducted. The data shows the demographic information of this particular sample, and the behaviour and attitude of employees towards the issuing of Section 54s.

Personal Information of Employees Interviewed

Employees from Shaft no. 1 and Shaft no. 10 formed part of the sample. Shaft no. 1 had suffered a fatal accident and was issued with a Section 54, and employees were sent to the mobilization centre for rehabilitation briefing. Shaft no. 10 staff were participating in a routine session at the mobilization centre.

The data includes both morning and night shift team members, and this explains why there are more winch operators; the night shift consists of more winch operators, 3-4 people on average. A small proportion of the sample represents panel leaders and miners, due to the fact that there is only one of each per panel. The mine is located in the North-West Province, where the majority of people speak Tswana and are South African citizens. Close to half of the employees interviewed did not complete matric (43%), and 20% (the older employees) are illiterate. There were 100% male employees interviewed, this can be attributed to the fact that female employees are not heavily involved in labour intensive activities such as rock drill or winch operation. Females are however, mostly involved in tramming, construction, and equipping.

Employee Attitudes towards Section 54

There is a significant drop in production when a Section 54 is issued, and there is no doubt that overall morale will be affected, as the saying goes that money at this level 'is not everything but the only thing'. Demoralized workers are unproductive pose a safety risk, both to themselves and to fellow workers. More than 50% of the respondents indicated that there is no remuneration for carrying out work remediation associated with Section 54s. Invariably, a Section 54 entails extra work which is not rewarded by extra remuneration, and again worker morale will be adversely affected.

The mine's stakeholders have done exceptionally well in educating their lower level employees in mine health and safety. It seems that the lower level employees have faith in the government, so they are more receptive to the DMR. These employees believe that the government can improve salaries and secure their jobs.

The employees understand that a Section 54 causes trouble for their supervisors, and can even lead to a charge of negligence or possible revocation of certificate. However, 12% of respondents felt that supervisors are happy when the inspectors are at the mine. A large proportion of employees (80%) is of the opinion that Section 54 is applied fairly, and this indicates that they trust the inspector's judgement. The assumption here is that the employees have good risk assessment and hazard identification skills. This apparently is not the case for a small proportion (20%) of the employees. The authors attribute this to different levels of education and understanding of the MHSA. This group of employees shows a good level of understanding and can be equated to the 16% with matric and 3% with a diploma.

A large proportion of employees (86%) acknowledge that their behaviour has changed; this indicates that the Section 54 does bring about change in the workplaces. This also indicates an awareness among employees as to how their actions could contribute to their section being served with a Section 54. The 13% who do not change their behaviour could possibly be the same individuals that indicated that Section 54 is not applied fairly and are therefore reluctant to change because of that perception.

The majority of employees (82%) would like to become inspectors because they see the power and authority that inspectors have over the mines, production, and bonuses. They also think that inspectors are well paid and they know that government employment has a number of benefits. 98% of employees understand that a Section 54 requires a work stoppage and remedial action before normal operations can resume. Almost all the employees agreed to participate in remedial work after a Section 54 has been issued so that their bonuses would be quickly reinstated. Only a very small proportion (2%) are unwilling to cooperate.

The bulk of employees (72%) are willing to assist the inspectors directly, as opposed to under instruction of their supervisors. The remaining 28% could be employees that are not required to interact with the inspectors for any reason. The workers are generally positive towards the issuing of Section 54 because of the faith they have in the government.

The employees made a few suggestions as to how the DMR can improve the system:

- Employees would prefer that the inspectors communicate directly with them
- Employees would prefer that the inspectors visit the shaft regularly
- Employees would prefer that the inspectors close only the non-complying panels instead of the whole shaft
- Employees would prefer that the time allocated for Section 54 remedies be reduced
- Inspectors must give recommendations on how to ensure compliance.

The majority (80%) of the employees think they know enough about the DMR. The few employees (20%) that would like to know more about the DMR put forward the following questions:

- Are there are any changes in the law in the offing?
- How does the DMR operate?

- How does one become an inspector?
- How does one obtain a blasting certificate?
- How does the DMR assist the worker?
- What is the DMR doing to reduce fatal accidents?
- What are the DMR's values?
- When is their next visit?

CONCLUSION

1.

The feedback indicates that employees are motivated by extrinsic, rather than intrinsic, factors. Cherry (2016) describes intrinsic motivation as performing an activity only because you find it enjoyable, or solving a problem only because you find the challenge fun and exciting. Brown (2007), states 'Extrinsic motivation refers to our tendency to perform activities for known external rewards, whether they be tangible (*e.g.* money) or psychological (*e.g.* praise) in nature.'

The law today is more risk-assessment-based, which leaves the employer to decide on what needs to be done - such as improving working standards. The data indicates that employees still perceive the inspector as the main law enforcer. Employees want Section 54 to be applied fairly, and believe that stoppages should apply only to the area (section) of the mine identified as being noncompliant and not the entire shaft, and thus removing the element of unfairness and generalization. Employees lack understanding on the roles and responsibilities of inspectors and DMR in general, as well as the feasibility of inspectors visiting the shafts every month. The reason for this could be that they are lower level employees, who lack an in-depth understanding of the health and safety culture or policies of the company. However, it does seem that the more trained and knowledgeable people are, the more they agree that the standards must be complied with.

Employees realize the impact of a Section 54 on their bonuses and thus want a Section 54 to be lifted as quickly as possible. The employees show a good understanding, of how to apply mine standards, MHSA requirements, and compliance. A very small percentage of this group showed an extremely good (in-depth) understanding of the MHSA and its application. Some employees want to know if there will be any changes to Section 54 or to how it is applied. Some employees really seem to be interested in becoming inspectors – to the point that they are willing to change their career paths.

Employees would prefer to communicate directly with the inspectors as opposed to via their supervisors (miner, shift boss, mine overseer). This group of employees seems to have a high level of respect and admiration for the mine inspectors. The employees are only worried about their bonuses; other than that, they are happy with the issuing of a Section 54 and understand that it is aimed at improving their working conditions, compliance, and safety in general.

There is evidence that employee morale is affected as regards job security, because employees realize that the length and frequency of Section 54 stoppages can result in job losses due to fixed costs continuing while production is at a standstill.

RECOMMENDATIONS

Although employees have shown a certain level of understanding, they still need in-depth training on the MHSA, existing mine procedures, standards, and current policies. The mine should make its corporate governance more effective.

Employees' stresses emanate from a lack of understanding of procedures, such as wanting to speak directly to the inspectors. This has a major impact on employee morale. There is an element of mistrust in supervisors, and the lower level employees feel that they are being left out of the interaction between supervisors and inspectors.

Frequent training on, and monitoring of, compliance should be conducted, and increased resources allocated to ensure compliance.

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APPENDIX

Table I. Sample data grouped by personal details.

Category	Rating
Shaft	18% from no. 10
	82% from no. 1
Gender	100% males
Population	100% blacks
Age	32%: 25-35
	68%: 35-65
Occupation	22% rock drill operator
	7% P/L 60% winch operator
	8% miner
Nationality	11% non-SA
	88% SA
Language	38% Tswana
	5% Sepedi
	5% English 23% Xhosa
	3% Zulu
	15% Sotho
	10% Tsonga
Education	20% Grade 0-7
	43% Grade 8-11
	16% Grade 12
	3% Diploma 2% N4
	Z/U 1VI

Table II. Employee behaviour after a Section 54 has been issued.

Questions				Rating
Bonus				65% Significant reduction
				13% No bonus
				21% Don't know
Additional	payment	for	workplace	53% No
remediation			-	46% Yes

Is the DMR good?	30% No
	70% Yes
Is the DMR bad?	30% think that it does not work well
	70% realize that Section 54 affects their remuneration
Workers' feelings about an inspector	62% become apprehensive when the inspector is around
visiting	37% are happy when the inspector is around
-	2% do not care
Workers perceptions of their supervisors	85% think the supervisor is apprehensive when the
when inspectors visit	inspector is around
	12% think that the supervisor is happy
	3% don't care

Table III. Employee attitudes towards the issuing of a Section 54.

Questions	Rating
Following instruction issued by the	42% said instructions are not followed
inspector	57% said the instructions are followed.
If Section 54 is applied fairly	20% unfair
	80 % fair
Does Section 54 influence behaviour	86% Yes
change	13% No
Would employees like to be inspectors?	82% Yes
	18% No
Remediation of workplace after	98% agree that they take part in remediation work
receiving Section 54	2% do not take part
Assisting the inspector	72% assist the inspector
	28% do not assist the inspector
Feelings about Section 54	95 % are positive about Section 54
	5% are negative

 ${\it Table IV. Sample grouped by their attitude\ towards\ Section\ 54.}$

Questions	Rating
Should changes be made to Section 54?	50% no changes needed
	50% the DMR needs to change
Wanting to know more about DMR	80% do not want to know more
	<20% want to know more
Preventative measures	80% approve compliance